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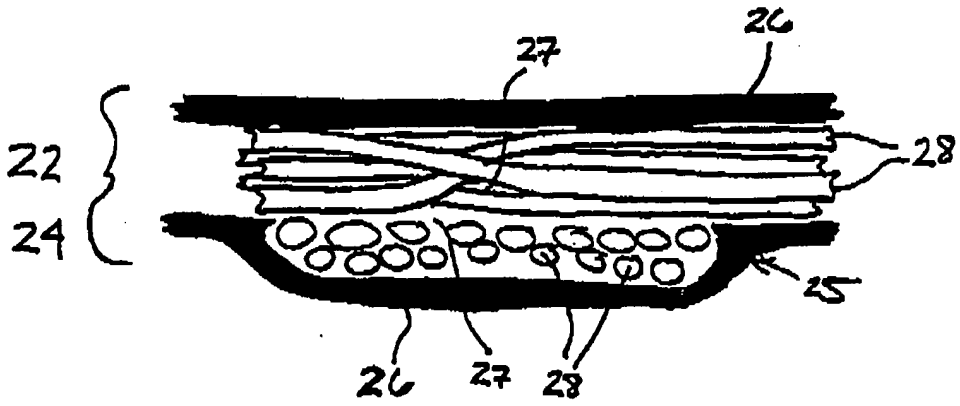
(54) Title: THIN SOFT TISSUE SURGICAL SUPPORT MESH



(57) Abstract

A soft and pliable surgical support mesh exhibiting increased resistance to inhabitation of infectious matter. The mesh includes a support trellis formed of multifilament yarns wherein the interstitial voids located between the filaments of said yarns are enclosed within an infection-impervious matrix. The meshes may be designed to be extremely thin yet retain the requisite strength for repairing soft tissue, which allows for a low profile when folded for delivery.

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[54] PERCUTANEOUS CATHETER DIRECTED OCCLUSION DEVICES

[75] Inventors: Frank Kotula, Maple Grove; Kurt Amplatz, St. Paul, both of Minn.

[73] Assignee: AGA Medical Corp., Golden Valley, Minn.

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,725,552.

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Related U.S. Application Data

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[51] Int. Cl.[6] A61B 17/08

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[58] Field of Search 606/213, 215, 606/216, 217, 151, 153, 191–198, 199, 200; 604/167, 281; 600/32; 128/899

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[57] ABSTRACT

A collapsible medical device and associated methods for occluding an abnormal opening in, for example, a body organ, wherein the medical device is shaped from a heat treatable metal fabric. The metal fabric is formed from a plurality of metal strands and is heat treated within a mold in order to substantially set a desired shape of the device. The medical device includes a fastener for attaching to the end of a guide wire or delivery catheter, wherein the shape of the medical device is formed such that the fastener is attached to the metal fabric within a recess formed in the shape of the medical device. A medical device having a preselected shape is delivered through a catheter or the like for deployment in a desired channel or opening in a patient's body. The medical device may be shaped, for example, to occlude an ASD, PDA, or a VSD.

18 Claims, 10 Drawing Sheets